Barrett's esophagus carries lower risk of malignancy than previously reported

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Patients with Barrett's esophagus may have a lower risk of esophageal cancer than previously reported, according to a large, long-term study published online June 16 in the *Journal of the National Cancer Institute.*

Barrett's esophagus is a premalignant condition, and patients who have it are often advised to have regular endoscopies to watch for signs of esophageal adenocarcinoma, the most common kind of esophageal cancer in many parts of the world. But how often Barrett's esophagus progresses to cancer has not been clear. Previous estimates of the rate of progression have varied widely.

In this study, Shivaram Bhat, B.Ch., MRCP, of Queens University Belfast and colleagues prospectively followed 8,522 patients in the Northern Ireland Barrett's Esophagus Registry, one of the largest registries in the world of people with the condition. After an average follow-up time of 7 years, 79 patients were diagnosed with esophageal cancer, 16 with cancer of the gastric cardia (the part of the stomach closest to the esophagus), and 36 with precancerous changes known as high-grade dysplasia. In the entire group, the incidence of these three conditions combined was 0.22% per year. Previous studies have reported an incidence of cancer among people with Barrett's esophagus between 0.58% and 3% per year.

The researchers also looked at the incidence of cancer and high-grade dysplasia in different subgroups of patients. Men were statistically significantly more likely to progress to malignancy than women, and

people age 60-69 had a higher risk than those under 50 or those age 80 and over. The highest rates of progression were among patients with low-grade dysplasia (1.40%) or specialized intestinal metaplasia (0.38%) at their initial endoscopy and biopsy.

The authors conclude that the risk of Barrett's esophagus progressing to esophageal cancer is less than previously reported and that this finding has implications for clinical practice. "Current recommendations for surveillance are based on higher estimates of cancer risk among patients with [Barrett's esophagus] than were seen in this study and therefore, they may not be justified," they write.

In an accompanying editorial, Douglas Corley, M.D., Ph.D., from Kaiser Permanente's research division in Oakland, Calif., notes that the study provides one of the first estimates of incidence of esophageal cancer in people with Barrett's esophagus from a large multicenter population.

He writes that the study provides support "for many paradigms underlying current thoughts about the management of Barrett's esophagus." For instance, people without specialized intestinal metaplasia are at relatively low risk and are less likely to benefit from surveillance or treatment while those with intestinal metaplasia are at increased risk. He notess that the increased risk "may make surveillance cost-effective if surveillance or treatment is effective (an unproved tenet to date)."

Corley adds that the study can "help inform the development of more meaningful "personalized risk scores that incorporate demographic, biochemical, and genetic factors."

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